

STATE OF NEW HAMPSHIRE

**FINAL 2012 Section 303(d)
Surface Water Quality List Submitted to EPA**

February 12, 2013



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Surface Water Quality List
Submitted to EPA for Approval

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TABLE OF CONTENTS

CHAPTER 1	INTRODUCTION.....	1-1
1.1	PURPOSE.....	1-1
1.2	ASSESSMENT METHODOLOGY AND TERMS	1-1
1.3	DATA.....	1-1
1.4	ASSESSMENT UNITS	1-1
1.5	DES SURFACE WATER QUALITY ASSESSMENT WEBSITE	1-2
CHAPTER 2	SECTION 303(D) LIST FORMAT	A
2.1	OVERVIEW.....	A

LIST OF APPENDICES

APPENDIX A: SECTION 303(D) LIST	B
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CHAPTER 1 INTRODUCTION

1.1 PURPOSE

The Federal Water Pollution Control Act [PL92-500, commonly called the Clean Water Act (CWA)], as last reauthorized by the Water Quality Act of 1987, requires each state to submit a list of impaired waters to the U.S. Environmental Protection Agency (EPA) every two years. The document is typically called the “303(d) List “ which is so named because it is a requirement of Section 303(d) of the CWA. The 303(d) List includes surface waters that:

- are impaired or threatened by a pollutant or pollutant(s),
- are not expected to meet water quality standards within a reasonable time even after application of best available technology standards for point sources or best management practices for nonpoint sources and,
- require development and implementation of a comprehensive water quality study (i.e., called a Total Maximum Daily Load or TMDL study) that is designed to meet water quality standards.

1.2 ASSESSMENT METHODOLOGY AND TERMS

The 2012 Section 305(b) and 303(d) Consolidated Assessment and Listing Methodology (i.e., the CALM) describes in detail how surface water quality assessment decisions were made. The CALM also includes descriptions and definitions of the many terms used to assess surface waters. A copy of the CALM is provided at <http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>. Readers are strongly encouraged to read the CALM before reviewing assessments as it will help one to better understand and interpret assessment results.

1.3 DATA

The 2012 assessments are supported by more than 1,20,000 grab samples and several million datalogger results. These data records represent more than 2,100 stream sites, 2,500 lake sites, and 540 marine sites covering over 200 water-quality and ecological constituents (most are available from the DES data warehouse, at http://www2.des.state.nh.us/OneStop/Environmental_Monitoring_Menu.aspx).

1.4 ASSESSMENT UNITS

Assessment Units (AU) are the basic unit of record for conducting and reporting water quality assessments. For the 2012 assessment the AUs have been mapped to the 1:24,000 scale hydrography that is linked to the National Hydrography Dataset (NHD); the national coverage used by EPA

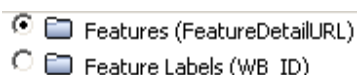
To help determine the extent and/or location of each AU, visual aids such as maps are very useful. Unfortunately, watershed report cards developed for the 2010 assessment have not yet been updated for the 2012 cycle but will be in the coming months. In the interim, GIS layers

have been set-up for users of the more common GIS software products. Currently, the AUs are available in Shape File and Geodatabase formats. KML files are available for Google Earth users. All GIS layers may be found at the department's FTP site. To access the GIS files mentioned:

- 1) Go to this address using a web browser: ftp://199.192.6.23/DES/wmb/WaterQuality/305B_303D/2012/GIS/
- 2) At the login window, click on the box in the lower left hand corner labeled "Login Anonymously".
- 3) The User name will then be automatically filled in with the word "Anonymous".
- 4) Type in your email address in the Email Address block.
- 5) Then click on the Log On button.
- 6) The [GIS] Folder should appear containing the files above

Shape files and the geodatabase are in NAD_1983, New Hampshire State Plane, Feet.
KML files are in WGS 84.

A note to Google Earth users – The KML files are set-up with labels and will default to drawing all labels for the state when you bring the KML files into Google Earth. To turn the labels off until zoomed in, uncheck the "Feature Labels"



1.5 DES SURFACE WATER QUALITY ASSESSMENT WEBSITE

The department's surface water quality assessment website (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>) contains the following materials needed for review of the final 303(d) List:

- ❖ Consolidated Assessment and Listing Methodology (CALM) (*PDF*)
 - Response to Comments on CALM (*PDF*)
- ❖ 2012, Final 303(d) List Submitted to EPA for Approval, Content Introduction
 - 2012, Final Submitted 303(d) List (*PDF*)
 - 2012, Final Submitted 303(d) List (*EXCEL*)
 - Map of Final Submitted 303(d) Impaired Waters (*PDF*)
 - Waters Removed from the 2010 Section 303(d) List (*PDF*)
 - Summary of Substantive changes between the 'Draft' and 'Final' 2012 303(d)
 - GIS Layers for the 2012, 305(b)/303(d) (*PDF*)
 - Response to Comments on the 2012, Draft 303(d) List (*PDF*)
 - Technical Support Document: Assessments of Aquatic Life Use Support in the Great Bay Estuary for Chlorophyll-a, Dissolved Oxygen, Water Clarity, Eelgrass Habitat, and Nitrogen (*PDF*)
 - Response to Comments on Changes between the April 20, 2012 'Draft' to July 19, 2013 'Final' 2012 303(d) List of Impaired Surface Waters (*PDF*)
- ❖ List of All Impaired Waters (*PDF*)
- ❖ List of All Impaired Waters (*EXCEL*)

CHAPTER 2 SECTION 303(D) LIST FORMAT

2.1 OVERVIEW

The Section 303(d) List is provided in Appendix A. As previously mentioned, the Section 303(d) List only includes waters that are impaired or threatened by pollutants that require Total Maximum Daily Load studies (TMDLs). Consequently, the 303(d) List represents a subset of all impaired waters as not all impairments require a TMDL. These are categorized by EPA as category “5”. Within that category, the department makes three distinctions which are described below:

5-T	Parameter is a pollutant that requires a TMDL. The assessment is the result of a combination of sampling and water quality modeling.
5-M	Parameter is a pollutant that requires a TMDL. and that parameter is a less severe exceedence of the impairment threshold.
5-P	Parameter is a pollutant that requires a TMDL and that parameter is a more severe exceedence of the impairment threshold.

The List is sorted by waterbody type and then Assessment Unit ID number or AUID (each waterbody has a unique AUID). Each record includes the impaired designated use in that assessment unit, the cause of impairment, the probable source of impairment, and an estimated date that the TMDL will be completed. As mentioned in Section 1.2, the reader is encouraged to review the 2012 Consolidated Assessment and Listing Methodology before reviewing the assessments as it will help one to better understand and interpret the assessment results.

APPENDIX A: Section 303(d) List